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In the Claims

1-20 (Canceled)

21. (Previously Presented) A welder and compressor combination comprising:

a transportable housing;

an engine mounted in at least a portion of the transportable housing;

an electrical generator configured to generate an arc welding current, the electrical generator mounted within the transportable housing to be driven by the engine; and

a screw air compressor driven by the engine.

22. (Previously Presented) The combination of claim 21 further comprising a clutch disposed between the screw air compressor and the engine.

23. (Previously Presented) The combination of claim 21 further comprising a belt in operable association and driven by the engine to drive the screw air compressor and an oil separator tank connected to the screw air compressor to separate oil from compressed air.

24. (Previously Presented) The combination of claim 21 further comprising an air filter configured to filter air to the screw air compressor and to supply air to a system output.

25. (Previously Presented) The combination of claim 21 further including a compressor oil cooler assembly connected to the screw air compressor and capable of reducing a temperature of compressor oil.

26. (Previously Presented) The combination of claim 25 wherein the compressor oil cooler assembly includes a dual purpose radiator having two cooling

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chambers, where one chamber cools compressor oil and a second chamber cools engine coolant.

27. (Previously Presented) The combination of claim 21 further including an inlet control valve pressure regulated and connected to control the flow of air in the screw air compressor.

28. (Previously Presented) The combination of claim 21 further comprising a first mounting bracket connecting the screw air compressor to the engine such that a longitudinal length of the screw air compressor is aligned with a longitudinal length of the engine.

29. (Previously Presented) An engine driven welder combination comprising:  
a welder housing having internal components mounted therebehind;  
an engine mounted within the welder housing;  
an electrical generator connected to the engine to generate an arc welding current; and

a non-reciprocating air compressor connected to the engine driven welder to be driven by the engine.

30. (Previously Presented) The engine driven welder combination of claim 29 further comprising a pulley arrangement mounted to the engine and a belt drivingly connecting the non-reciprocating air compressor to the engine via the pulley arrangement.

31. (Previously Presented) The engine driven welder combination of claim 29 further comprising a first mounting bracket and a second mounting bracket, wherein each of the first and second mounting brackets are connected to only one of an engine block and an engine head.

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32. (Previously Presented) The engine driven welder combination of claim 31 wherein the first and second mounting brackets are connected to one another and the first mounting bracket supports the non-reciprocating air compressor.

33. (Previously Presented) A welding and air compression system comprising:

means for compressing air having at least one rotating means in a longitudinal cylinder to generate compressed air;

means for generating an arc welding current;

means for driving both the means for compressing air and the means for generating an arc welding current; and

means for connecting the air compressing means to the means for driving.

34. (Previously Presented) The welding and air compression system of claim 33 further comprising a means for separating an air and a fluid generated by the air compressing means.

35. (Previously Presented) The welding and air compression system of claim 33 further comprising a means for cooling compressor oil.

36. (Previously Presented) The welding and air compression system of claim 33 wherein the means for compressing air is a screw air compressor.

37. (Previously Presented) The welding and air compression system of claim 33 wherein the means for generating an arc welding current includes an engine driven generator.

38. (Previously Presented) The welding and air compression system of claim 33 wherein the means for driving includes an engine capable of receiving an externally mounted air compressor.

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39. (Previously Presented) The welding and air compression system of claim 33 further comprising a means for controlling the means for compressing air.

40. (Previously Presented) The welding and air compression system of claim 39 wherein the means for controlling the means for compressing air is a magnetic clutch assembly.

41. (Previously Presented) The combination of claim 21 wherein the transportable housing includes a panel positioned proximate the screw air compressor.

42. (Previously Presented) The combination of claim 41 further comprising a first filter and a second filter located behind the panel and fluidly connected to the screw air compressor.

43. (Previously Presented) The combination of claim 42 wherein the first and second filters are on a common side of the welder and compressor combination.

44. (Previously Presented) The combination of claim 43 wherein the screw air compressor and the panel are on the common side of the welder and compressor combination.

45. (Previously Presented) The combination of claim 42 further comprising a third filter fluidly connected to the screw air compressor wherein at least one of the first, second, and third filters is a coalescing filter and two of the first, second, and third filters are particle filters.

46. (Previously Presented) The combination of claim 23 further comprising a thermostat in thermal communication with a flow through the oil separator tank and constructed to control operation of the screw air compressor.

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47. (Previously Presented) The engine driven welder combination of claim 29 further comprising a first filter and a second filter in fluid communication with the non-reciprocating air compressor.

48. (Previously Presented) The engine driven welder combination of claim 47 further comprising a third filter in fluid communication with the non-reciprocating air compressor and wherein one filter is a coalescing filter and two filters are particle filters.

49. (Previously Presented) The engine driven welder combination of claim 47 wherein the first filter, second filter, and non-reciprocating air compressor are positioned on a common side of the engine driven welder combination to allow easy common access thereto.

50. (Previously Presented) The engine driven welder combination of claim 49 further comprising an access panel positioned on the common side of the engine driven welder combination and constructed to provide access to the first filter, the second filter, and the non-reciprocating air compressor.

51. (Previously Presented) The engine driven welder combination of claim 29 further comprising an oil separator in fluid communication with the non-reciprocating air compressor and having a thermostat in thermal communication with a fluid passing therethrough, the thermostat constructed to control operation of the non-reciprocating air compressor.

52. (Previously Presented) The welding and air compression system of claim 39 wherein the means for controlling the means for compressing air includes a thermostat thermally connected to a fluid flow through an oil separator.

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53. (Previously Presented) The welding and air compression system of claim 33 further comprising means for filtering an input flow and means for filtering an output flow of the means for compressing air.

54. (Previously Presented) The welding and air compression system of claim 53 wherein the input flow filter means, the output flow filter means, and the means for compressing air are on a common side of the welding and air compression system.

55. (Previously Presented) The welding and air compression system of claim 54 further comprising means for accessing the input flow filter, the output flow filter, and the means for compressing air through a housing.